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ATTORNEY'S DOCKET NO: S01448/70000

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Thomas J. Awad et al.

Serial No:

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Filed:

Herewith

For:

METHOD AND APPARATUS FOR PROVIDING AN ERROR

CHARACTERIZATION ESTIMATE OF AN IMPULSE RESPONSE DERIVED USING LEAST SQUARES

Examiner:

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Art Unit:

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Commissioner for Patents Washington, D.C. 20231

STATEMENT FILED PURSUANT TO THE DUTY OF DISCLOSURE UNDER 37 CFR §§1.56, 1.97 AND 1.98

Sir:

Pursuant to the duty of disclosure under 37 C.F.R. §§1.56, 1.97 and 1.98, the Applicant requests consideration of this Information Disclosure Statement.

PART I: Compliance with 37 C.F.R. §1.97

This Information Disclosure Statement has been filed before the mailing date of a first Office Action on the merits in the above-identified case.

No fee or certification is required.

PART II: Information Cited

The Applicant hereby makes of record in the above-identified application the information listed on the attached form PTO-1449 (modified). The order of presentation of the references should not be construed as an indication of the importance of the references.

PART III: Remarks

Documents cited on the attached form PTO-1449 (modified) are enclosed unless otherwise indicated on the attached form PTO-1449 (modified). It is respectfully requested that: 552789.1



- 1. The Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims;
- 2. The enclosed form PTO-1449 be signed by the Examiner to evidence that the cited information has been fully considered by the Patent and Trademark Office during the examination of this application;
- 3. The citations for the information be printed on any patent which issues from this application.

By submitting this Information Disclosure Statement, the Applicant makes no representation that a search has been performed, of the extent of any search performed, or that more relevant information does not exist.

By submitting this Information Disclosure Statement, the Applicant makes no representation that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b).

By submitting this Information Disclosure Statement, the Applicant makes no representation that the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. §102.

Notwithstanding any statements by the Applicant, the Examiner is urged to form his own conclusion regarding the relevance of the cited information.

An early and favorable action is hereby requested.

Respectfully submitted,

Thomas J. Awad et al., Applicants

 $\mathbf{p}_{\mathbf{v}}$

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Docket No. S01448/70000 Dated: August 8, 2001

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FORM PTO-1449/A and B (Modified) INFORMATION DISCLOSURE STATEMENT BY APPLICANT					APPLICATION NO.: ATTY		DOCKET NO.: S01448/70000		
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Examiner's Initials#	Cite	U.S. Patent Docume			Name of Patentee or Applicant of Cited			Date of Publication or of issue of Cited Document MM-DD-YYYY	
	No.	Number		Kind Code	Document	Document			
	1	5,200,915			Hayami et al.		04/06/1993	PTC	
	2	5,442,569			Osano		08/15/1995	. <	2
	3	5,630,154			Bolstad et al.		05/13/1997	N.	\mathbb{G}
	4	5,790,59	0,598		Moreland et al.		08/04/1998		Σ.≣
	5	5,889,85	5,889,857		Boudy et al.		03/30/1999	0.5	3 🗏
	6	5,974,37	5,974,377		Navarro et al.		10/26/1999	ıί	
	7	6,151,358			Lee et al.		11/21/2000		
	<u> </u>								
	·			FORE	IGN PATENT DOCUMENTS				<u> </u>
Examiner's Initials#	Cite No.	Fore Office/	eign Patent Docu	ment Kind	Name of Patentee or Applicant of Cite Document		Date of Publication of Cited Document	Translation (Y/N)	
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***************************************	8	Adaptive filters; Theory and Applications/B. Farhang-Boroujeny. John Wiley & Sons Ltd. (chapter 413-437)					chapter 12, pages		
· · ·	9	Numerical recipes in C: the art of scientific computing/William H. Press. Cambridge University Press (cha 1-2, pages 1-99)					rsity Press (chapters		
	10	Linear Predictive Spectral Shaping for Acoustical Echo Cancellation. Sanro Zlobec. Department o Engineering, McGill University, Montreal, November 1995.					ment of Electrical		
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a copy of this re	ference is	not provided a	s it was previously o	cited by or su	bmitted to the office in a prior application,	Serial No	, filed		, ar

[NOTE - Must provide a copy of any patent, publication, other information listed, even if it was previously submitted to, or cited by, the U.S. Patent Office in an earlier application, unless the earlier application is identified by the IDS and is relied upon for an earlier filing date under 35 U.S.C. §120, and the copy was provided in the earlier application.]